

## ABSTRACT OF THE DISCLOSURE

A method of automatically controlling a transmission power of a wireless communication apparatus which, in order to reduce power consumption of a wireless communication apparatus, adjusts the transmission power so as to eliminate waste power consumption as much as possible, thereby enabling communication to be carried out at an optimum transmission power, and a storage medium which stores the method are provided. At a start of communication, a wireless communication apparatus performs communication while setting the transmission power to the maximum value (S101). Each time when transmission succeeds, the transmission power is reduced by a predetermined amount (S106). When transmission fails as a result of the reduction by the predetermined amount, retransmission is carried out with increasing the transmission power by the predetermined amount, i.e., returning the transmission power to the immediately previous value (S107). The increased power is set as an optimum transmission power. The power is maintained until transmission fails. When transmission fails after the optimum transmission power is set, transmission power is raised to the maximum value and setting of optimum transmission power is again carried out (S112).